

What is claimed is:

1. A satellite signal receiver comprising:

5 a satellite signal reception unit for calculating a current position of the satellite signal receiver using an electric wave from a satellite, in response to a positioning request;

a timer for clocking an elapsed time in calculating the current position of the satellite signal receiver; and

10 power-on/off controlling means for controlling an on/off state of power supplied to both the satellite signal reception unit and the timer on the basis of information including the positioning request, the elapsed time clocked by the timer, and a condition under which the satellite signal reception unit  
15 receives the signal from the satellite.

2. The satellite signal receiver according to claim 1, further comprising a communication unit for receiving the positioning request given from an external system and  
20 transmitting information about the calculated current position to the external system.

3. The satellite signal receiver according to claim 1, wherein the power-on/off controlling means includes:

25 switch means for switching on or off the power supplied to both the satellite signal reception unit and the timer; and control means for controlling turn on/off operations of the switch means based on the information.

30 4. The satellite signal receiver according to claim 3, wherein the satellite signal reception unit includes memory means for memorizing the calculated positional information

including the number of ephemerides serving as data concerning an orbit of the satellite orbit,

and the information about the condition is information about the number of ephemerides.

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5. The satellite signal receiver according to claim 4, wherein the control means includes first control means for turning on the switch means in response to the positioning request, setting means for adjustably setting a period of active  
10 time counted from a first time instant at which the switch means turns on to a second time instant at which the satellite signal reception unit calculates the current position, and second control means for turning off the switch means when the elapsed time reaches the period of active time.

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6. The satellite signal receiver according to claim 5, wherein the setting means is configured so that larger the less the number of ephemerides, the larger the period of active time.

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7. The satellite signal receiver according to claim 3, wherein the satellite signal reception unit includes memory means for memorizing the calculated positional information including the number of ephemerides serving as data concerning an orbit of the satellite orbit and clock means for clocking  
25 a positioning time for the calculation of the current position,

and the information about the condition is information about an elapsed time from the last calculation of the current position obtained using the clock means.

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8. The satellite signal receiver according to claim 7, wherein the control means includes first control means for turning on the switch means in response to the positioning

request, setting means for adjustably setting a period of active time counted from a first time instant at which the switch means turns on to a second time instant at which the satellite signal reception unit calculates the current position, and second  
5 control means for turning off the switch means when the elapsed time counted by the timer reaches the period of active time.

9. The satellite signal receiver according to claim 7, wherein the control means includes first control means for  
10 turning on the switch means in response to the positioning request, setting means for setting a period of active time counted from a first time instant at which the switch means turns on to a second time instant at which the satellite signal reception unit receives the electric waves necessary in number  
15 for the calculation of the current position, and second control means for turning off the switch means when the elapsed time counted by the timer reaches the period of active time.

10. The satellite signal receiver according to claim 7, wherein the control means includes first control means for  
20 turning on the switch means in response to the positioning request, setting means for setting a period of active time counted from a first time instant at which the satellite signal reception unit receives the electric waves necessary in number  
25 for the calculation of the current position to a second time instant at which the satellite signal reception unit calculates the current position, and second control means for turning off the switch means when the elapsed time counted by the timer reaches the period of active time.

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11. The satellite signal receiver according to claim 4, wherein the control means includes first control means for

turning on the switch means in response to the positioning request, setting means for adjustably setting a period of active time counted from a first time instant the satellite signal reception unit receives the electric waves necessary in number  
5 for the calculation of the current position to a second time instant at which the satellite signal reception unit calculates the current position, and second control means for turning off the switch means when the elapsed time reaches the period of active time.

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12. A satellite signal receiver comprising:

a satellite signal reception unit for intermittently calculating a current position of the satellite signal receiver at adjustable intermittent intervals by using an electric wave  
15 from a satellite;

a timer for clocking an elapsed time every time when the current position of the satellite signal receiver is calculated; and

power-on/off controlling means for intermittently  
20 controlling an on/off state of power supplied to the satellite signal reception unit on the basis of information including the elapsed time clocked by the timer every time when the current position of the satellite signal receiver is calculated.

25 13. The satellite signal receiver according to claim 12, wherein the power-on/off controlling means includes means for determining whether or not the elapsed time clocked by the timer reaches a given period of time with no completion of a positioning process and means for commanding the off state of  
30 the power when the elapsed time reaches the given period of time with no completion of the positioning process.

14. The satellite signal receiver according to claim 12,  
wherein the power-on/off controlling means includes a counter  
for counting the number of failure in calculating the current  
position and means for adjusting the intermittent intervals  
5 depending on the count of the counter.

15. The satellite signal receiver according to claim 14,  
wherein the adjusting means is configured to make the  
intermittent intervals longer when it is impossible to  
10 calculate the current position in succession.

16. The satellite signal receiver according to claim 14,  
wherein the adjusting means is configured to make the  
intermittent intervals longer when the satellite signal  
15 reception unit is impossible to receive the electric wave from  
any satellite in succession.